

REMARKS

Prior to entry of this Response, claims 55-73 stood pending in this application, with claims 55, 64, 66, 67, and 70-73 being independent claims. With this Response Applicants cancel claims 55-73, and add new claims 74-79, with independent claims 74 and 77. The amendments add no new matter, as the application as originally-filed supports each of the new claims. Applicants respectfully request reconsideration and favorable action in this case.

35 U.S.C. § 103 Rejections

The office action rejects each of claims 55-66 under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 5,943,649 to Fado et al. (hereinafter "Fado") in view of U.S. Patent Application Publication No. 20030220123 A1 of Motohashi. The office action rejects each of 67-73 under 35 U.S.C. § 103(a) as allegedly unpatentable over Motohashi. With this Response, Applicants cancel claims 55-73, rendering the pending rejections moot.

Applicants believe the newly pending claims are patentable over any of the art previously relied upon in rejecting the claims and, in particular, over any of U.S. Patent No. 5,003,532 to Ashida et al. (hereinafter "Ashida"), Ito et al. JP 2003-102074 (hereinafter "Ito"), Motohashi, or Fado.

Should the Examiner wish to discuss any of the following comments or any claim amendments deemed needed to result in allowance, Applicants kindly request the Examiner to contact the undersigned by telephone at the number given below.

Independent claim 74

By way of background, independent claim 74 is directed to a wireless microphone communication system for use by a plurality of operators on a stage and recites, in part, that each of a plurality of computers (1) displays one or more character strings input through a respective keyboard by an operator associated with the computer, (2) sends the one or more character strings to the other computers; and (3) displays one or more character strings being input by other operators associated with other computers through respective keyboards connected to the

other computers and being sent from the other computers, thereby advantageously allowing all of the displays to display the same content.

Ashida fails to disclose the features recited by independent claim 74. Ashida discloses video conference controllers (20) coupled to equipment (11 to 18). While Ashida discloses a microphone 16 coupled to the video conference controller 20, Ashida fails to disclose a keyboard operative to receive an operator's input and, thus, naturally fails to teach or suggest that the video conference controller 20 could or would send character strings input by the operator to the other conference controllers to display the operators' instructions. Moreover, Ashida fails to disclose or suggest that the conference controller 20 (alleged as corresponding to the wireless receiver) receives status information (e.g., RF level, VU level, etc.) of the microphone 16. (See, e.g., Ashida at col. 1, lines 10-35.)

Motohashi also fails to disclose the features described above. While Motohashi does describe 3rd and 4th embodiments (see Figs. 6 and 7), these embodiments disclose only a mobile terminal 111 coupled to an external sub-display 605. According to Motohashi, the mobile terminal 111 communicates with the external sub-display 605 to allow the sub-display 605 to display still images or alarm messages. However, the 3rd and 4th embodiment of Motohashi still fail to disclose a mobile terminal 111 sending character strings input by its operator through its keyboard to the external sub-display 605 to display the same content, and thus naturally fails to teach or suggest the idea of sharing display of the operators' instructions input by plural operators of computers. Note that, of course, the external sub-display 605 is nothing but an external peripheral or accessory for the mobile terminal 111 and thus is not operated independently by a dedicated operator other than the mobile terminal's 111 operator.

Ito likewise lacks the features described above. While Ito discloses a wireless receiver coupled to an LCD 4 for displaying battery status of the wireless microphones, Ito fails to disclose a plurality of computers coupled to a receiver over a LAN and coupled to respective keyboards, and thus cannot disclose sharing display of the operators' instructions on displays coupled to the respective operators' computers.

Fado also lacks the features described above. Fado discloses a microphone connected to a computer that sets up the microphone using a PC-based set-up wizard. Fado does not disclose a plurality of computers recited by claim 74, does not disclose the receiver recited by claim 74 (at least because the microphone therein is not wireless), does not disclose the idea of sharing display of the operators' instructions on displays coupled to respective operators' computers, and does not disclose displaying on each of those computers one or more character strings input through respective keyboards of those computers by respective operators. Further, a person of ordinary skill in the art would not have looked to a method of setting up a microphone connected to a PC, such as taught by Fado, when attempting to solve the problem of sharing information between operators of a wireless microphone system for use on a stage. Moreover, no combination of Fado with any of Ashida, Motohashi, or Ito would result in a system having the features recited by the claims or the advantages provided by the claimed system.

For at least the reasons described above, Applicants submit that independent claim 74 is patentable over any of Ashida, Motohashi, Ito, or Fado, individually or in any combination. Claim 75 depends from claim 74 and, accordingly, Applicants submit that claim 75 is likewise patentable over any of Ashida, Motohashi, Ito, or Fado, individually or in any combination. Applicants request reconsideration and withdrawal of the rejections.

Dependent claim 76

In addition to the features described above with reference to independent claim 74, claim 76, which depends from claim 74, recites (1) a camera positioned above the stage for acquiring images of the entire stage while a given wireless microphone is carried and moved by an operator on the stage, (2) the camera being connected over the LAN to a given computer; (3) wherein the given computer continuously receives from the camera the images acquired by the camera; (4) wherein the given computer continuously determines whether or not the information indicative of the status of the given wireless microphone indicates an RF level lower than a predetermined threshold; and (5) wherein the given computer stores an image received at a time when the given computer determines that the RF level is lower than the predetermined threshold. Advantageously, the claimed system allows

operators to recognize “dead points” on a stage by simply checking the images stored in the recited given computer after the operator walks around the stage with the recited given microphone.

Motohashi fails to disclose or suggest the features above, and neither a modification of Motohashi, nor any combination of Motohashi with Fado, can provide a system with the features recited by the claim or the advantages of those features. Motohashi discloses a camera 104 installed in a mobile terminal 111. However, a person of ordinary skill in the art would have no motivation to modify the camera 104 in the mobile terminal 111 for use taking images of the entire stage so as to acquire images that can be stored when the computer detects a dead point, nor is such modification practical. For example, an ordinarily skilled artisan would not be motivated to use a “built-in” camera 104 of the mobile terminal 111 to acquire images of the entire stage, when the stage is so large that a LAN must be installed to connect computers, a receiver, and the camera. Additionally, Motohashi does not disclose any wireless microphone from which the mobile terminal 111 might receive the recited status information including an RF level. Similarly, an ordinarily skilled artisan would not be motivated to use the “built-in” camera 104, the “built-in” receiver 103, and the “built-in” controller 101 to detect “dead points” on a stage, because Motohashi does not disclose any computer that receives an RF level of a target wireless microphone carried on and moved around a stage. Applicants submit that no reading of Motohashi discloses or suggests the claimed elements or the advantages of the claimed system, and that to arrive at the claimed system starting with the system taught in Motohashi requires significantly more than the combination of known elements, according to the known functions of each, to yield a predictable result.

Ashida also fails to disclose or suggest the claimed features described above, or the advantages provided by the combination of the claimed features. In a typical video conference system, such as that taught by Ashida, a close-up camera 12 is used to acquire images of a speaker in a conference for the purpose of displaying the image of the speaker in a remote conference point. Ashida neither discloses nor suggests continuously determining whether or not information indicative of a status of a given wireless microphone indicates an RF level lower than a predetermined

threshold, much less storing an image of an entire stage when that condition is satisfied. Of course, to store an image when an RF level was lower than a predetermined level would make no sense in the system of Ashida, at least because any microphone would be positioned beforehand so as to not be at a dead point. Moreover, because Ashida does not disclose or suggest the recited features, Ashida also cannot provide the advantage of searching for and finding “dead points” on a stage. Moreover, a person of ordinary skill in the art would not look to Ashida, or any document disclosing the type of conference systems taught by Ashida, in order to solve the problem of finding dead points on a stage for a signal from a wireless microphone. Applicants submit that no reading of Ashida discloses or suggests the claimed elements or the advantages of the claimed system, and that to arrive at the claimed system starting with the system taught in Ashida requires significantly more than the combination of known elements, according to the known functions of each, to yield a predictable result. For at least these reasons, Applicants submit that claim 76 is patentable over either Motohashi or Ashida, individually or in combination, and request reconsideration and withdrawal of the rejection.

Claims 77-79


Each of claims 77-79 recites elements similar to those described above with respect to claims 74-76, respectively. Accordingly, Applicants submit that each of claims 77-79 is patentable over the documents cited by the office action, and request reconsideration and withdrawal of the rejections.

CONCLUSION

Accordingly, all remaining claims are in condition for allowance for the reasons provided above. Applicants submit this Response with a Petition for a One-Month Extension of Time and the required fee, thereby extending the time for Response to January 4, 2010. Although Applicants believe that no additional fees or petitions are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 13-2855 of Marshall, Gerstein & Borun, LLP under Order No. 19036/41594.

Respectfully submitted,

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